Jade Lum, Biology, Visit 1

Ecosystem Study

Animal Aquatics

I went to Makapu’u tide pools for my first visit on October 5th. The time I got there was 5:05 and I left at 5:55. The tides were low, around .62 feet. It was very hard to find a good place for observations. I was trying to find a place near a splash zone but shallow enough to observe. Then I found a very good space. It was near a splash zone but it had enough rocks blocking out some of the water from the splashes. The pool was shallow enough to observe the different organisms and it’s depth ranged from 3-15 inches. The area was rocky with many places to hide, it was very sandy which was good for animals that like to camouflage, and it was a nice size.

I noticed that the pool I chooses had more varieties of species then the other pools I looked at (I didn’t look at pools that were too deep or too big), though there weren’t as many different species as I thought there would be. I was wondering if the pools weren’t as abundant because of “people impact”. I also noticed when I put my feet in the water it was more on the warmer side. I went on a Sunday so many people were there and there was a lot of rubbish covering the beaches. Next to the area I was observing there was a heap of ocean debris. It was sad to see how our beaches were so littered.

I saw a couple different species today, which included sergeant major fish, two different kinds of sea urchins (wana and ‘ina), hermit crabs, a lot of sea anemone, and some Kama’ Ana crabs, and lastly I saw some sand fish which camouflaged into the sand very easily, it was very hard to see it sometimes. I was also noticing where each of the organisms was in their environment. The fish were all hiding under rocks, unless they were swimming very quickly from one place to another. The ‘ina are rock-boring urchins so they live in small holes on rocks. The other wana was found near the edge of the water in a small crevice. Hermit crabs were found on the rocks close to the water, on the other hand the Kama’ Ana crab was just on the rocks, it wasn’t really close to the water. The sea anemone was lines on the rock wall and they were many of them.

The animals I saw had different characteristics that benefit them. The sergeant major had black strips along its body. I believe that it uses it for some kind of camouflage to the sand. Its camouflage was not as good as the sand fish. At points it was camouflage was so good it was hard to find it. That would be very useful if a predator was after it. The ‘ina and wana have spines for protections. The wana is black to camouflage in the rocks while the ‘ina was more a light red colors, perhaps to camouflage with the different plants in the water. The wana’s spikes are very thin and spiky because more people are likely to step on it. The ‘ina’s spikes are not as spiky because since they are rock boring and live on the side, it’s not as likely people will step on it. Kama’ Ana crabs are black to camouflage in with the rocks while hermit crabs use the shell on their back for protection. I’m not quite sure about the sea anemone. I would like to learn more about them.

Each animal has a different way of movement. The fish swim very swiftly and quick. If they wanted they could move to a different pool by jumping. I actually happened to witness one jumping out of the water. The sea urchins extend their spines while they move on the bottom. I’m not quite sure about the rock boring urchins, if they stay on their rock for most of the time or not. The hermit crab uses it’ legs to move forward, while the Kama’ Ana crab moves sideways with its legs. Once again I’m don’t know much about sea anemones. I’m pretty sure they sedentary, but I still have to research more about it.

One thing I didn’t really notice before was that how each species is so different. I never really thought about how each species in the tide pools had a purpose for being the way they are and I never really took the time to think about why these neighbors are so different. Before I just kind liked watching the fish or looking for stuff while I was at the tide pools, not really thinking why they were so unique. I am glad I found a nice place to focus my project on.